

**BEST AVAILABLE COPY**

DOCKET NO. RFMI01-00227  
SERIAL NO. 10/824,843  
PATENT

**REMARKS**

Claims 1-26 were pending in this application.

Claims 1-26 have been rejected.

Claims 6, 10, and 18 have been amended as shown above.

Claims 1-26 remain pending in this application.

Reconsideration and full allowance of Claims 1-26 are respectfully requested.

**I. REJECTION UNDER 35 U.S.C. § 103**

The Office Action rejects Claims 1-5, 7-9, 11-17, and 21-26 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,324,387 to Kamgar et al. ("*Kamgar*") in view of U.S. Patent No. 6,822,696 to Talmola et al. ("*Talmola*"). The Office Action rejects Claims 6, 10, and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over *Kamgar* and *Talmola* in view of U.S. Patent No. 5,734,974 to Callaway, Jr. et al. ("*Callaway*"). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP* § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)). Only when a *prima facie* case of obviousness is established does the burden shift to the Applicant to produce

DOCKET NO. RFMI01-00227  
SERIAL NO. 10/824,843  
PATENT

evidence of nonobviousness. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the Applicant is entitled to grant of a patent. (*In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on the Applicant's disclosure. (*MPEP* § 2142).

Claims 1, 7, and 15 recite increasing a current supplied to one or more first amplifiers and/or allowing one or more second amplifiers to amplify an incoming signal "in response to" an "amplified incoming signal" exceeding a "first threshold" and a "desired signal" not exceeding a "second threshold." Claims 1, 7, and 15 are therefore crystal clear – one or more events occur in response to a "first threshold" being exceeded and a "second threshold" not being exceeded.

DOCKET NO. RFMI01-00227  
SERIAL NO. 10/824,843  
PATENT

*Kamgar* recites the use of two voltage references (“ $T_r$ ” and “ $T_p$ ”). *Kamgar* also recites what happens when one voltage reference is exceeded and another voltage threshold is not exceeded. If “ $T_r$ ” is exceeded and “ $T_p$ ” is not (condition 2 in Table 1), the gain of a low noise amplifier 105 is decreased. If “ $T_p$ ” is exceeded and “ $T_r$ ” is not (condition 3 in Table 1), the gain of the low noise amplifier 105 remains unchanged. (Col. 5, Lines 20-50).

*Kamgar* clearly recites what occurs if a first voltage reference is exceeded and a second voltage reference is not – the gain of the low noise amplifier 105 is decreased. The Office Action fails to establish that decreasing the gain of the low noise amplifier 105 in *Kamgar* discloses, teaches, or suggests increasing a “current supplied to the one or more first amplifiers” as recited in Claims 1, 7, and 15.

*Talmola* simply recites that the bias current of an RF amplifier 304 is increased if a bit error rate (BER) is worse than two acceptable levels (denoted “X” and “Y”). (Figure 3; Col. 3, Lines 8-33). *Talmola* never recites that the bias current supplied to the RF amplifier 304 is increased if a first threshold is exceeded and a second threshold is not exceeded. Moreover, *Talmola* compares the same BER value to two acceptable levels. *Talmola* never recites that one signal is compared to a first threshold and a second signal is compared to a second threshold.

In effect, *Kamgar* performs a particular function (decreasing a gain) when a particular condition is met (one signal exceeds a first threshold and another signal does not exceed a second threshold). The Office Action asserts that it would be obvious to take another function from *Talmola* (increasing a bias current) and perform that function in *Kamgar* when the same condition in *Kamgar* is met. The Office Action makes this assertion even though *Talmola* only

DOCKET NO. RFMI01-00227  
SERIAL NO. 10/824,843  
PATENT

performs its function when a different condition is met (a single BER value is worse than two acceptable levels). This is improper.

The Patent Office must provide an explanation as to why the function of *Talmola* (increasing a bias current) would be performed when the condition of *Kamgar* is met (one signal exceeds a first threshold and another signal does not exceed a second threshold). The Patent Office has not made this showing. As a result, the Patent Office has not established that a person skilled in the art would modify *Kamgar* with *Talmola* to reach the Applicant's claimed invention as recited in Claims 1, 7, and 15.

The Office Action states that *Kamgar* "inherently teaches adjusting the bias current of an amplifier based on the comparing [of] two signals to two voltage references by adjusting the gain of the amplifier." (*Office Action, Page 6, Second paragraph*). However, it is inadequate for the Office Action to simply assert that "adjusting" the gain of an amplifier inherently discloses "adjusting" the bias current of the amplifier. To anticipate the claims or render the claims obvious, the Patent Office must show that *Kamgar* inherently discloses "increasing" a bias current when the gain of the low noise amplifier 105 is decreased (Condition 2 in Table 1). Only then could *Kamgar* inherently disclose "increasing" a "current supplied to the one or more first amplifiers" when a first threshold is exceeded and a second threshold is not. Because the Patent Office has not made this showing, the Patent Office cannot assert that *Kamgar* inherently discloses increasing a "current supplied to the one or more first amplifiers" when a first threshold is exceeded and a second threshold is not exceeded as recited in Claims 1, 7, and 15.

For these reasons, the proposed *Kamgar-Talmola* combination fails to disclose, teach, or

DOCKET NO. RFMI01-00227  
SERIAL NO. 10/824,843  
PATENT

suggest all elements of Claims 1, 7, and 15 (and their dependent claims).

Regarding the dependent claims, the dependent claims are patentable over the cited art due to their dependence from allowable base claims and in light of their own recitations. For example, Claims 21, 23, and 25 recite that "one or more second amplifiers" are allowed to amplify an incoming signal in response to an "amplified incoming signal" exceeding a first threshold and a desired signal not exceeding a second threshold (where "one or more first amplifiers" produce the "amplified incoming signal").

The Office Action cites column 3, lines 8-38 of *Talmola* as anticipating these elements of Claims 21, 23, and 25. However, this portion of *Talmola* simply recites that the bias current supplied to an RF amplifier 304 is adjusted based on the bit error rate produced using that same RF amplifier 304. In other words, *Talmola* simply recites amplifying a signal using an RF amplifier 304 and adjusting the bias current of that same RF amplifier 304. *Talmola* lacks any mention of using a second RF amplifier instead of or in addition to the RF amplifier 304 when certain conditions are met.

For these reasons, the proposed *Kamgar-Talmola* combination fails to disclose, teach, or suggest all elements of Claims 21, 23, and 25.

Accordingly, the Applicant respectfully requests withdrawal of the § 103 rejection and full allowance of Claims 1-26.

## II. CONCLUSION

The Applicant respectfully asserts that all pending claims in this application are in

**DOCKET NO. RFMI01-00227**  
**SERIAL NO. 10/824,843**  
**PATENT**

condition for allowance and respectfully requests full allowance of the claims.

/

DOCKET NO. RFMI01-00227  
SERIAL NO. 10/824,843  
PATENT

**SUMMARY**

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at [wmunck@davismunck.com](mailto:wmunck@davismunck.com).

The Commissioner is hereby authorized to charge any fees connected with this communication (including any extension of time fees) or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: March 10, 2006

  
\_\_\_\_\_  
William A. Munck  
Registration No. 39,308

P.O. Drawer 800889  
Dallas, Texas 75380  
Phone: (972) 628-3600  
Fax: (972) 628-3616  
E-mail: [wmunck@davismunck.com](mailto:wmunck@davismunck.com)

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER: \_\_\_\_\_**

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**